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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Applicant: Medsker, et al. Examiner:

Serial No.: 10/015,734 Group Art Unit:

Filed: December 13, 2001 Date: February 14, 2002

For: "POLYMERIC BLOCKS OF AN OXETANE OLIGOMER, POLYMER OR COPOLYMER, CONTAINING ETHER SIDE CHAINS TERMINATED BY FLUORINATED ALIPHATIC GROUPS, AND HYDROCARBON POLYMERS OR COPOLYMERS"

Assistant Commissioner for Patents
Washington, D.C. 20231

CERTIFICATE OF MAILING

Sir:

The undersigned hereby certifies that the attached **INFORMATION DISCLOSURE STATEMENT, PTO FORM-1449 AND 36 CITED REFERENCES** were mailed to the Assistant Commissioner for Patents, Washington, D.C. 20231, with sufficient first-class postage, no special handling, on February 14, 2002, before 5:00 PM, thereby ensuring that such document(s) will be in the hands of the U.S. Postal Service by the close of business this day.

The Commissioner is hereby authorized to charge any fees, which might be required or credit any overpayment of fees with regard to the attached document(s) to Account No. **07-1045.**

Respectfully submitted,

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Attorney Docket No.: GT-5420 (GC-GU)

Enclosures: Return Postcard
Certificate of Mailing
Information Disclosure Statement, Form PTO-1449,
Copies of 36 References

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INFORMATION DISCLOSURE STATEMENT

Sir:

This invention relates to a composition comprises an oxetane oligomer or polymer or copolymer block wherein each repeat group has at least one ether side chain which is terminated by a fluorinated aliphatic group and optionally with the proviso that at least two different repeat units of the oligomer or polymer or copolymer have different R_f groups. The oxetane block is connected to a hydrocarbon polymer block derived from a mono or polyhydroxyl initiator. The terminal fluorinated alkyl groups impart good stain resistance to the oligomer or polymer or copolymer. In another embodiment, a fluorinated aliphatic or alkyl alcohol is reacted with an amino dicarboxylic acid with the reaction product thereof being subsequently grafted to a maleated polyolefin or a maleated polymer derived from a vinyl substituted aromatic monomer. The fluorinated alcohol also imparts good stain resistance to the grafted copolymer. Both compounds can be utilized as an additive in polymers as for exampl various polyolefins.

As authorized and encouraged under 37 C.F.R. §1.97-1.99, applicant hereby cites as a means of complying with the duty of disclosure set forth in 37

C.F.R. §1.56, the following patents and/or documents, copies enclosed, which the Examiner should consider with respect to the above-identified United States Patent Application:

U.S. PATENT DOCUMENTS		
U.S. PATENT/DOCUMENT NO.	**DATE**	**INVENTOR/OWNER**
3,096,344	July 2, 1963	Case
3,859,253	January 7, 1975	Bourat et al.
4,898,981	February 6, 1990	Falk et al.
4,946,992	August 7, 1990	Falk et al.
5,015,693	May 14, 1991	Duchesne et al.
5,025,052	June 18, 1991	Crater et al.
5,068,397	November 26, 1991	Falk et al.
5,097,048	March 17, 1992	Falk et al.
5,099,026	March 24, 1992	Crater et al.
5,362,819	November 8, 1994	McBain et al.
5,370,919	December 6, 1994	Fieuws et al.
5,391,637	February 21, 1995	Willis et al.
5,405,911	April 11, 1995	Handlin, Jr. et al.
5,418,296	May 23, 1995	Willis et al.
5,468,841	November 21, 1995	Malik et al.
5,543,200	August 6, 1996	Hargis et al.
5,545,464	August 13, 1996	Stokes
5,560,992	October 1, 1996	Sargent et al.
5,576,095	November 19, 1996	Ueda et al.
5,637,772	June 10, 1997	Malik et al.
5,650,483	July 22, 1997	Malik et al.
5,654,450	August 5, 1997	Malik et al.
5,663,289	September 2, 1997	Archibald et al.
5,668,250	September 16, 1997	Malik et al.
5,668,251	September 16, 1997	Malik et al.
5,672,651	September 30, 1997	Smith
5,674,951	October 7, 1997	Hargis et al.
5,703,194	December 30, 1997	Malik et al.
5,798,402	August 25, 1998	Fitzgerald et al.
5,807,977	September 15, 1998	Malik et al.
5,852,148	December 22, 1998	Behr et al.
5,898,046	April 13, 1999	Raiford et al.
5,998,574	December 7, 1999	Fishback et al.
6,020,451	February 1, 2000	Fishback et al.
6,127,517	October 3, 2000	Koike et al.

ARTICLES/DOCUMENTS
Material Properties of Fluoropolymers and Perfluoroalkyl-Based Polymers, pp. 47-67, Richard R. Thomas, DuPont Jackson Laboratory, Deepwater, New J rsey 08023, edited by Hougham et al., Plenum Press, New York, 1999.

A copy of each document is included for the express purpose of providing the Patent and Trademark Office with an ample opportunity to evaluate the same and to arrive at an independent assessment of its materiality, if any, with regard to the examination of the application.

In reviewing the enclosed copies of the above publications, the Examiner is requested to ignore any underscoring or highlighting which may appear because such markings may or may not have any relationship to the subject matter of the above-identified application. The copies being submitted with this Information Disclosure Statement are the best copies available at this time.

An examination of the present application considering the above document is requested.

Respectfully submitted,

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